Cutaneous adverse reactions to acyclovir: case reports

G E ROBINSON,* J WEBER,* C GRIFFITHS,† G S UNDERHILL,‡ D J JEFFRIES,‡ AND D GOLDMEIR*

From the *Praed Street Clinic and the †Department of Dermatology, St Mary's Hospital, and the ‡Department of Virology, St Mary's Hospital Medical School, London

SUMMARY Intravenous, oral, and topical formulations of acyclovir have been successful in treating genital herpes. We report on two patients who developed skin reactions while taking acyclovir, which resolved when treatment was stopped.

Introduction

Acyclovir [9- (2-hydroxyethoxymethyl) guanine] is a potent antiviral agent of low toxicity with high specificity against herpes viruses. ¹⁻³ It is available in intravenous, oral, and topical formulations. We report on two patients who developed adverse cutaneous reactions while taking oral acyclovir.

Case reports

CASE 1

A 29 year old homosexual man was under surveillance at the Praed Street Clinic for persistent generalised lymphadenopathy (PGL) syndrome. Primary genital herpes, which was confirmed on culture, developed in 1981 and has been recurrent on the right buttock.

In August 1983 he presented with an extensive recurrence; new crops of vesicles and crusting lesions were noted. Oral acyclovir 200 mg five times daily, was started. While he was taking acyclovir he developed further vesicles on the buttock and over the next two weeks these spread progressively to other parts of the body (penis, scrotum, legs, and axillae). He was apyrexial. The disseminated vesicles were like those of herpes, but electron microscopical examination of vesicle fluid gave negative results, and the virus was not cultured from the vesicles despite repeated swabbing. Viral inclusion bodies were not shown in the lesions by light microscopy.

In view of the clinical suggestion of disseminated herpes infection, intravenous acyclovir 500 mg three

Address for reprints: Dr G S Underhill, Senior Registrar, Department of Virology, St Mary's Hospital Medical School, Paddington, London W2 1PG

Accepted for publication 19 April 1984

times daily for eight days was started. New lesions developed during the first five days of intravenous treatment.

He was discharged taking oral acyclovir. On review 12 days later the lesions were crusted and healing, and no subsequent new lesions had developed. The patient noted a rash in the right axilla, however, which was bright red, raised, pruritic, and consistent with urticaria. He had no history of allergy and was taking no concomitant medication. The acyclovir was stopped. The rash spread and affected the trunk, arms, and thighs symmetrically. It was treated symptomatically with chlorpheniramine and calamine lotion, and faded within 48 hours.

Subsequent herpetic recurrences have not been treated with acyclovir, but virus cultured from these lesions has been shown to be fully sensitive to acyclovir in vitro.

CASE 2

A 19 year old woman presented in February 1983 with primary genital herpes. Initially recurrences occurred monthly and lasted five days. She was seen on each occasion, and cultures for herpes simplex virus (HSV) gave positive results. After four months the recurrences became more frequent, occurring at fortnightly intervals. This was associated with severe depression. In September she was admitted to the psychiatric ward after attempting suicide. Continuous oral acyclovir 200 mg four times daily was started as her frequent herpetic recurrences were thought to be contributing to her mental state. She continued to take acyclovir for two months, during which time she was free of symptoms. Within seven days of stopping the acyclovir she developed a recurrence, which was associated with a lowering of mood. The drug was therefore restarted. Three

weeks later she presented with an itchy rash on her palms and the soles of her feet, which was diagnosed as a lichenoid eruption. There was no history of allergy and she was not taking concomitant medication.

The acyclovir was stopped, and the rash resolved during the following week. The patient had two further recurrences of herpes in the following five weeks, however, and threatened suicide again. Acyclovir was restarted, but 14 days later the eczematous rash returned; it was more extensive and involved the palms, soles, legs, arms, and back of the neck. Oral acyclovir treatment was stopped.

Comment

Acyclovir has been used successfully in all formulations to treat primary genital herpes. 1-3 Its value in recurrent attacks has yet to be established,23 although oral acyclovir taken continuously suppresses recurrences.4 We report on two patients who developed cutaneous reactions while taking acyclovir,

which resolved when treatment was stopped. In one case the reaction reappeared when treatment was started again. We know of no other report of rashes developing as a reaction to oral acyclovir, although cases have been described after intravenous treatment.56

References

- 1. Mindel A, Adler MW, Sutherland S, Fiddian AP. Intravenous acyclovir treatment for primary genital herpes. Lancet 1982; i: 697-700.
- Nilsen AE, Assen T, Halsos AM, et al. Efficacy of oral acyclovir in the treatment of initial and recurrent genital herpes. Lancet 1982; ii: 571-3.
- Cory L, Nahmias AJ, Guinan ME, Benedetti JK, Critchlow
- CW, Holmes KK. A trial of topical acyclovir in genital herpes simplex infections. N Engl J Med 1982; 306:1313-9. Strauss SE, Seidleri M, Takiff HE. Suppression of recurrent genital herpes with oral acyclovir. Clinical Research 1983; 31: 543A.
- Smith CI, Scullard GH, Gregory PB, Robinson WS, Merigan TC. Preliminary studies of acyclovir in chronic hepatitis B. Am J Med 1982; 73:267-70.
- 6. Balfour HH Jr, Bean B, Laskin OL, et al. Acyclovir halts rogression of herpes zoster in immunocompromised patients. N Engl J Med 1983; 308: 1448-53.